

that a press-in amount becomes a predetermined amount, the press-in amount being a distance between the seating portion and a lower portion of a electrical part body of the electrical part when the electrical part is mounted on the contact pin and an external force is not applied on the electrical part from a press member; and
assembling the selected upper plate on the lower plate.

REMARKS

INTRODUCTION:

In accordance with the foregoing, claims 3, 14 and 15 have been amended. Claims 1-15 are pending and under consideration.

OBJECTIONS TO CLAIMS 3, 14 AND 15:

It is respectfully submitted that the present amendments overcome the objections.

REJECTIONS UNDER 35 U.S.C. §112:

It is respectfully submitted that the present amendments overcome the rejections.

REJECTIONS UNDER 35 U.S.C. §102/103:

Claims 1-7 and 11-15 are rejected under 35 U.S.C. §102(a) as being anticipated by Barabi et al.

Independent claim 1 recites a tubular member having an end portion detachably engaging with the first plunger, and a portion slidably contacting with another one of the first and second plungers.

The Examiner states that FIGS. 3A and 3B of Barabi et al. teach the features regarding the tubular member and the first and second plungers. According to the Examiner, the spring barrel 51 of this reference corresponds to the claimed tubular member and the piston ends 63, 65 of this reference correspond to the claimed first and second plungers. Applicant respectfully disagrees.

The piston ends 63, 65 of Barabi et al. move within the elongated spring barrel 51, but do not engage the elongated spring barrel 51. This differs from, for example, FIG. 2 of the present invention, which illustrates that the stopper portion 21a of the first plunger 21 engages the tubular member 25 to move the tubular member within the upper through hole 17a. Thus, this reference does not disclose that the tubular member has "an end portion detachably engaging with the first plunger, and a portion slidably contacting with another one of the first and second plungers."

An advantage of the invention of claim 1 is that the first plunger can be replaced with a replacement first plunger, and also electric conduction between the plunger and the tubular member can be improved because the plunger and tubular member slidably contact each other.

Claim 3 depends from claim 1, and recites that the first plunger is replaced with a replacement first plunger having a different shape from the first plunger. As is apparent from FIGS. 3A and 3B of Barabi et al., plunger 63 and 65 of Barabi et al. is not separable from the barrel 51 of the contact pin so that the plunger can not be replaced with a replacement plunger.

Claims 4-6 depend from claim 1, and recite "different shapes for the contact portions with respect to different shapes of the contacts." However, since Barabi et al. only relates to a BGA, this reference does not disclose the land shape contacts and pin shape contacts of claims 4 and 6, respectively. Furthermore, this reference does not appear to teach the claimed "mount shaped" and "plural mount-shaped" contact portions to respectively accommodate the land shaped contacts and the pin shaped contacts.

Claims 2, 7 and 11-14 also depend from claim 1, and are therefore patentably distinguishable from Barabi et al.

Regarding independent claim 15, at page 4, lines 15-16, and page 6, lines 14-16 of the Office Action, the Examiner states that the platform 25 of Barabi et al. can be replaced with another platform of a different height. However, the Examiner has not indicated where this reference teaches changing the platform 25. This reference only teaches accommodation of a BGA device and thus does not disclose teaching that the platform 25 can be changed. The invention of claim 15 can secure a stable and constant contact pressure between the terminal of the electrical part and the contact pin by making the press-in amount constant through selecting and changing the upper plate, so that a constant electrical conduction can be secured even when the size and type of the electrical part to be tested is changed. Therefore, the portion of the socket to be tested is changed, and socket parts other than the upper plate can

be commonly used, resulting in a more economical structure.

Accordingly, withdrawal of the rejection of claim 15 is requested.

Claims 8-9 are rejected under 35 U.S.C. §102(e) as being anticipated by Fredrickson et al.

Claim 8 recites that an arrangement range of the lower side through holes is wider than an arrangement range of the upper side through holes. This feature is illustrated, for example, in present FIG. 1. This figure illustrates that the right-most one of the upper through holes 17a is between the press member 30 and the socket 11. However, the right-most one of the lower through holes 16a is below the socket member 11. Thus, nine of the lower through holes 16a are spaced over a wider range than six of the upper through holes 17a. This wide arrangement is due to the fact that the upper through holes 17a are spaced from each other with the same spacing as the lower through holes 16a.

In contrast, FIGS. 3A and 3B of Frederickson et al., relied upon by the Examiner, illustrate equal numbers of holes in the housing 310 and the plate portion 322. Specifically, a range between the left-most through hole 328 in the plate portion 322 is equal to a range between the left-most socket 240 and the right-most socket 240.

Claim 10 is rejected under 35 U.S.C. §103(a) as being unpatentable over Fredrickson et al. in view of Barabi et al.

Claim 10 depends from independent claim 8, and is patentable over Frederickson et al., for the at least the above reasons with respect to the width arrangements. Barabi et al. does not appear to overcome these deficiencies, and is not relied upon by the Examiner to do so.

CONCLUSION:

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

Serial No. 10/075,764

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS:

Please AMEND claims 3, 14 and 15 as follows:

3. (TWICE AMENDED) A socket for an electrical part according to claim 1, wherein said [said] first plunger is replaced with a replacement first plunger having a contact portion having a different shape from the first plunger in accordance with a shape of the terminal of the electrical part.

14. (ONCE AMENDED) A socket for an electrical part according to claim 13, wherein in the upper side through hole, the first plunger, the tubular member, and [a coil spring having] the elastic member have a same inner and a same outer diameter [of] as the tubular member and are disposed in order from top to bottom, and in the lower side through hole, the second plunger is disposed so that a peripheral portion of an upper surface opposite to the second stopper portion of the second plunger abuts a lower portion of the coil spring, a shank portion projecting upward from the upper surface opposite to the second stopper portion of the second plunger is inserted, via the coil spring, into the inside of the tubular member to slidably engage with the tubular member.

15. (ONCE AMENDED) A method of assembling a socket for an electrical part comprising a socket body and a contact pin which is provided for the socket body and through which an electrical [parts] part having a terminal and a printed circuit board are electrically connected, said socket body having a lower plate to be mounted to the printed circuit board and an upper plate which is disposed above the lower plate and on which the electrical part is to be mounted, wherein said upper plate has a seating portion on which the electrical part is placed in

a contacting manner, the method comprising:

preparing a plurality of the upper plates each having the seating portion of a different height;

selecting one of the upper plates in accordance with the electrical part to be tested so that a press-in amount [L] becomes a predetermined amount, the press-in amount [L] being a distance between the seating portion and a lower portion of a electrical part body of the electrical part when the electrical part is mounted on the contact pin and an external force is not applied on the electrical part from [the] a press member; and

assembling the selected upper plate on the lower plate.